

Work Order ID 110281-2

December-17-13 9:20:03 AM

Split

D4148-041

110281

Page 1

Item ID: D4148-041

Revision ID:

Item Name: Fwd X-Tube Lug Ass'y

Start Date: 12/17/13 Start Qty: 10.00

Required Date: 12/17/13 Req'd Qty: 10.00

Reference:

B110281

6

10

10

Accept

N9000040100

Setup Start

NS1

Stop

NS2

Cust Item ID:

Customer:

Approvals:

Process Plan: MLS

Date: 13-12-17

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start

NR1

Stop

NR2

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

D4148

E

100

100

Small Fab

Small Fab

Memo

1- Assemble as per dwg

0.00

0.00

6x

14/03/20
DAS
36
9-89

110

110

QC

Quality Control

QC5- Inspect part completeness to step on W/O

Memo

0.00

0.00

DAS
27
9-89
14/3/20

6

120

120

Packaging

Packaging

Identify as per dwg & Stock Location: St 460

Memo

0.00

0.00

DAS
27
9-89
14/3/20

DAS
06
9-89

6

MAR 20 2014

Work Order ID 110281

December-17-13 9:20:03 AM

110281

Page 2

Item ID: D4148-041
 Revision ID:
 Item Name: Fwd X-Tube Lug Ass'Y
 Start Date: 12/17/13 Start Qty: 10.00 *10*
 Required Date: 12/17/13 Req'd Qty: 10.00 *10*
 Reference:

Accept *N9000040100* Setup Start *NS1*
 Stop *NS2*
 Cust Item ID:
 Customer:

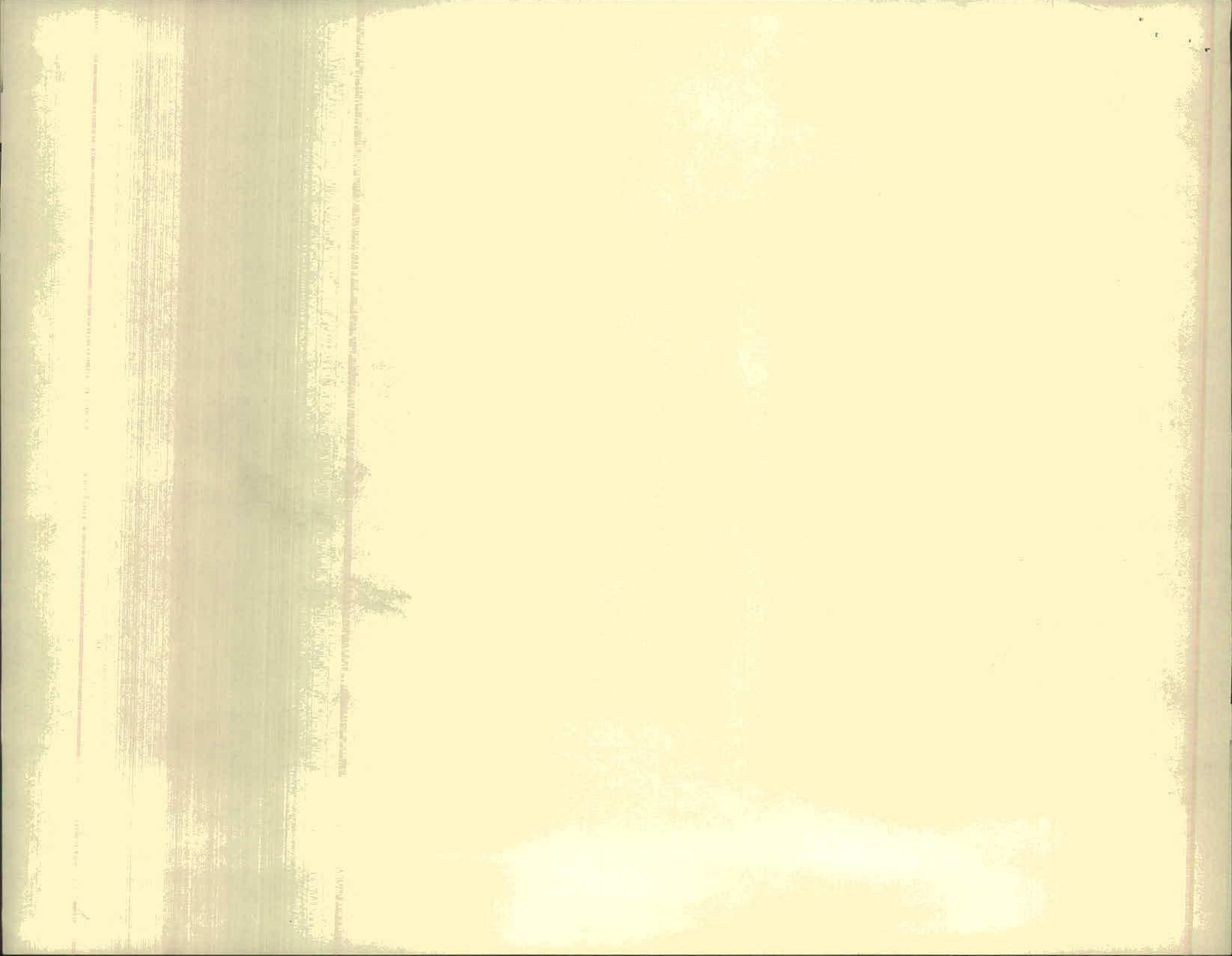
Approvals: Process Plan: _____ Date: _____
 QC: _____ Date: _____

Tooling: _____ Date: _____
 SPC (Y/N): _____ Date: _____
 Run Start *NR1*
 Stop *NR2*

Sequence ID/
 Work Center ID
 130
 130
 QC
 Quality Control
 Operation
 Description
 QC21- Final Inspection - Work Order Release
 Memo

Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
0.00							
0.00							

MLJ 14-03-21
 MLJ 14-03-20



Picklist Print

December-17-13 9:20:03 AM

Page 1

Work Order ID: 110281

Parent Item: D4148-041

Parent Item Name: Fwd X-Tube Lug Ass'Y

Start Date: 12/17/13

Required Date: 12/17/13

Start Qty: 10.00

Required Qty: 10.00

Comments: IPP Rev:A 10.06.24 new issue DD verf:EC
 IPP Rev:B 10.07.22 as per revB DD verf:JLM
 DD verf:EC IPP REV:D 11.03.02 AS PER DWG REV.D DD VERF:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
MS21043-3 Nut		Purchased	No			100	Each	1,006.0000	12	20		14/03/19	DAS 36 9-89
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				FG		80							
				103691		80							
				GA		200							
				m126741		200							
				ST315		726							
				124555		125							
				m126741		601							
MS21043-4 Nut		Purchased	No			100	Each	981.0000	13	30		14/03/19	DAS 36 9-89
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				FG		36							
				104603		36							
				GA		145							
				125807		145							
				ST509		800							
				m127255		800							
D2690-6 Lanyard		Manufactured	No			100	Each	23.0000	1	10		14/03/19	DAS 36 9-89
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				ST014		16							
				100513		3							
				102246		4							
				94775		9							
				ST019		7							
				109594		7							

B113245
 (6x)



Picklist Print

December-17-13 9:20:03 AM

Page 2

Work Order ID: 110281

Parent Item: D4148-041

Start Date: 12/17/13

Required Date: 12/17/13

Parent Item Name: Fwd X-Tube Lug Ass'Y

Start Qty: 10.00

Required Qty: 10.00

D3910-1 Manufactured No
Crosstube Lug

100 Each 21.0000 1 10

14/03/19 DAS 36 9-89

Location Loc Qty Loc Code

ST464

21

106717

18

81474

2

89772

1

B 110135 (6)

D4091-1 Manufactured No
Mounting Lug

100 Each 11.0000 1 10

14/03/19 DAS 36 9-89

Location Loc Qty Loc Code

ST144

11

107990

11

B109452 (60)

D4148-1 Manufactured No
Crosstube Lug Plate, Fwd

100 Each 3.0000 2 20

14/03/19 DAS 36 9-89

Location Loc Qty Loc Code

ST145

3

106002

1

85753

2

B110067 (11X)

D4148-3 Manufactured No
Stud Receiver, Lower

100 Each 10.0000 1 10

14/03/19 DAS 36 9-89

Location Loc Qty Loc Code

ST144

10

108524

2

109609

8

B111082 (5X)

D4148-5 Manufactured No
Eyebolt Stud

100 Each 21.0000 1 10

14/03/19 DAS 36 9-89

Location Loc Qty Loc Code

ST145

21

105616

21

6

December-17-13 9:20:03 AM

Shop Packet Print

Page 2

Picklist Print

December-17-13 9:20:03 AM

Page 3

Work Order ID: 110281

Parent Item: D4148-041

Parent Item Name: Fwd X-Tube Lug Ass'Y

Start Date: 12/17/13

Required Date: 12/17/13

Start Qty: 10.00

Required Qty: 10.00

AN3C12A
Belt

Purchased No

100 Each 192.0000 2 20

14/03/19
DAS
36
9-89

Location Loc Qty Loc Code

ST351 192

M127743 192

AN4C13A
BOLT

Purchased No

100 Each 154.0000 3 30

14/03/19
DAS
36
9-89

Location Loc Qty Loc Code

GA 97

m125978 97

ST356 3

123900 3

ST514 52

124805 52

ST516 2

124215 2

MS17984-C413
Quick Release Pin

Purchased No

100 Each 32.0000 1 10

14/03/19
DAS
36
9-89

Location Loc Qty Loc Code

ST332 32

118612 2

m125827 1

m126872 29

MS20615-4M18
Rivet

Purchased No

100 Each 222.0000 8 80

14/03/19
DAS
36
9-89

Location Loc Qty Loc Code

GA 25

125654 25

ST312 197

125162 97

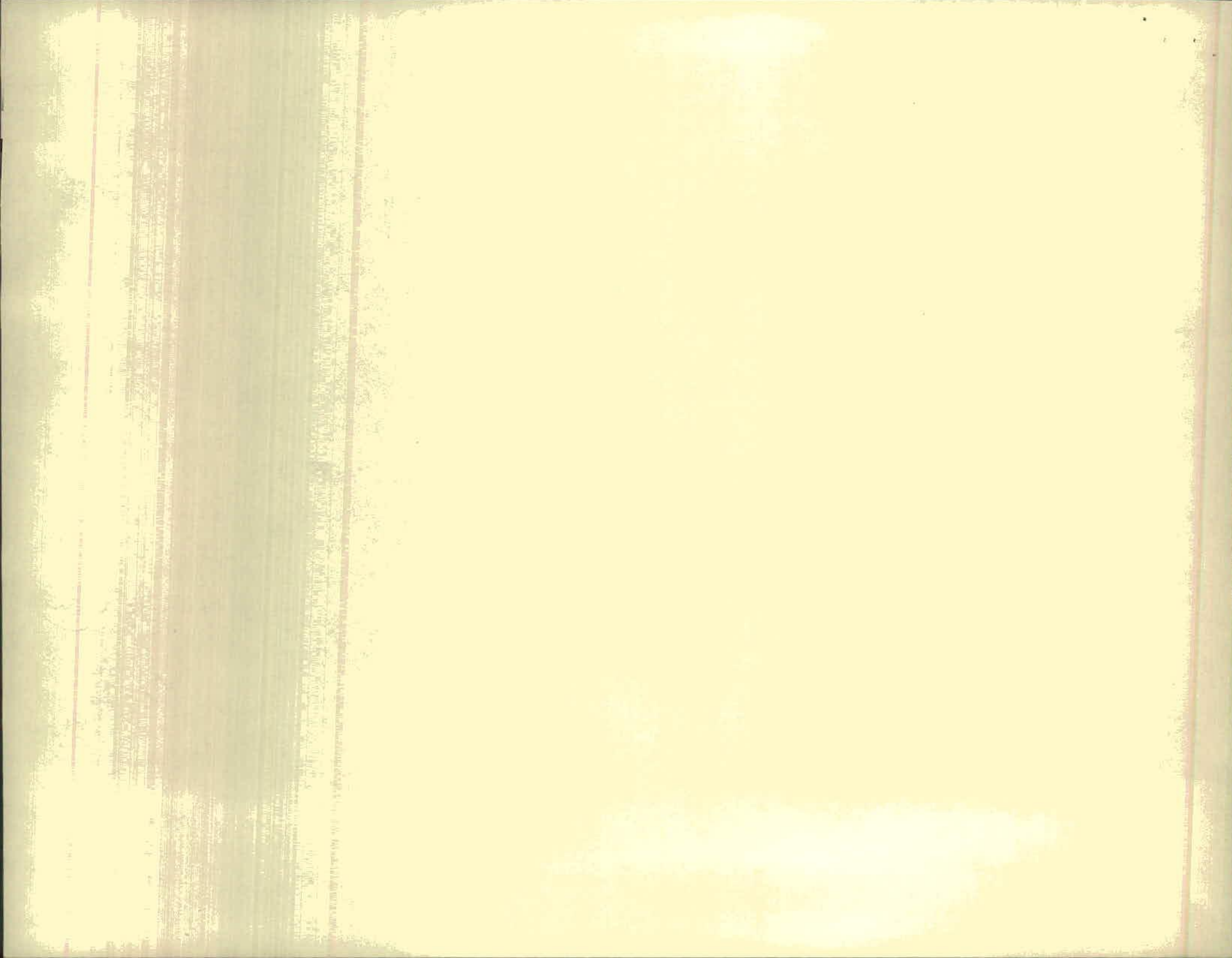
m127580 100

M128429
48x

December-17-13 9:20:03 AM

Shop Packet Print

Page 3



Picklist Print

December-17-13 9:20:03 AM

Page 4

Work Order ID: 110281

Parent Item: D4148-041

Parent Item Name: Fwd X-Tube Lug Ass'Y

Start Date: 12/17/13

Required Date: 12/17/13

Start Qty: 10.00

Required Qty: 10.00

NAS1149C0332R

Purchased

No

100

Each

10,701.000

4

40

WASHER

DAS
36
9-89

14/03/19

Location

Loc Qty

Loc Code

FP001

254

123355

254

GA

1548

125654

1548

ST292

119

123248

18

123759

10

125268

91

st510

8654

m126319

3154

m127306

2500

m127410

3000

ST517

126

124580

126

NAS1149C0432R

Purchased

No

100

Each

5,617.0000

6

60

WASHER

DAS
36
9-89

14/03/19

Location

Loc Qty

Loc Code

GA

2181

m125807

2181

ST292

68

119124

6

121255

7

121825

8

122441

55

ST510a

3368

m126221

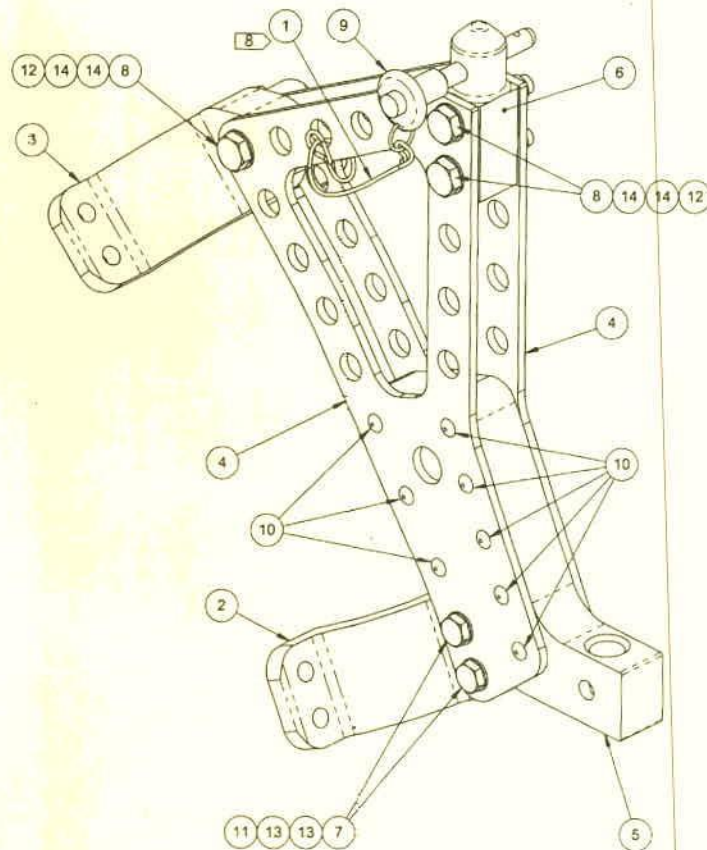
3368

36

December-17-13 9:20:03 AM

Short/Packets Print

Page 4



D4148-041 FWD X-TUBE LUG ASSY

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D4148-041" PER DART QSI 044 6.1
- 7) WEIGHT: 3.66 lbs
- 8) ATTACH D2690-6 TO D4148-1 BY LOOPING AROUND A LIGHTENING HOLE FIRST AND THEN SECURE TO MS17984-C413

ITEM	QTY -041	P/N	DESCRIPTION
	X	D4148-041	FWD X-TUBE LUG ASSY
1	1	D2690-6	LANYARD
2	1	D3910-1	X-TUBE LUG
3	1	D4091-1	MOUNTING LUG
4	2	D4148-1	FWD X-TUBE LUG PLATE
5	1	D4148-3	STUD RECEIVER-LOWER
6	1	D4148-5	EYEBOLT STUD
7	2	AN3C12A	BOLT
8	3	AN4C13A	BOLT
9	1	MS17984-C413	PIN, QUICK RELEASE
10	8	MS20615-4M18	RIVET, SOLID, PAN-HEAD
11	2	MS21043C3	NUT, SELF-LOCKING
12	3	MS21043C4	NUT, SELF-LOCKING
13	4	NAS1149C0332R	WASHER
14	6	NAS1149C0432R	WASHER

RELEASED
2013-08-15
MP

E	B6-4 Ø0.266 HOLE ADDED FOR CARGO TUBE INSTALLATIONS	AJS	13.07.22
D	HOLE DIA CHANGED TO 0.252" (D6-3); HOLE DIA CHANGED TO 0.250" (C8-5); REPLACED QTY(2) AN3C12A, MS21043C3 AND QTY(4) NAS1149C0332R WITH QTY(2) AN4C13A, MS21043C4 AND QTY(4) NAS1149C0432R (D3-1, C4-2)	SC	11.02.22
C	REDESIGNED D4148-1/3 TO ADDRESS COMPATIBILITY ISSUES WITH D350-591 SHORT STEPS	MEE	10.10.12
B	REPLACED QTY(3) MS20615-4M18 WITH QTY(2) EACH AN3C12A, MS21043-3 AND QTY(4) NAS1149C0332R WASHER (ZN D3-1, B7-2 & B4-2); MS20615-4M18 WAS MS20615-4M20 (ZN D3-1 & B7-2); Ø0.191 2 PL REPLACES Ø0.129 3 PL (ZN D6-3); Ø0.129 7 PL WAS 10 PL (ZN A7-3); Ø0.191 WAS 0.129 (ZN C8-5); REASON: SEE TR-D350-607-2 REV. B.	MB	10.07.06
A	NEW ISSUE	MB	10.06.11
REV	DESCRIPTION	BY	DATE
DESIGN	MB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV: E
MFG. APPR.	<i>[Signature]</i>	D4148	SHEET 1 OF 5
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	FWD X-TUBE LUG ASSY	NTS
DATE	13.07.22	COPYRIGHT © 2010 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS UNDERSTANDING THAT IT IS NOT TO BE USED FOR ANY PURPOSES OR DISCLOSED TO ANY THIRD PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

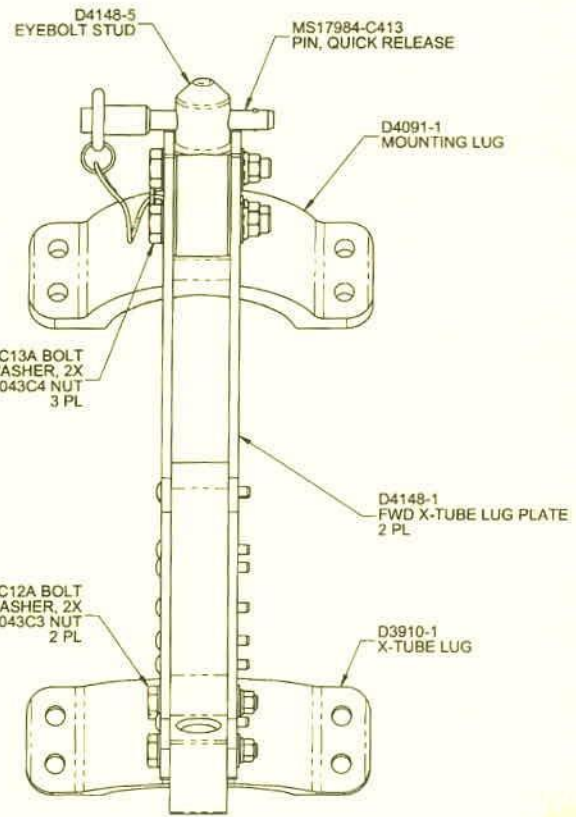
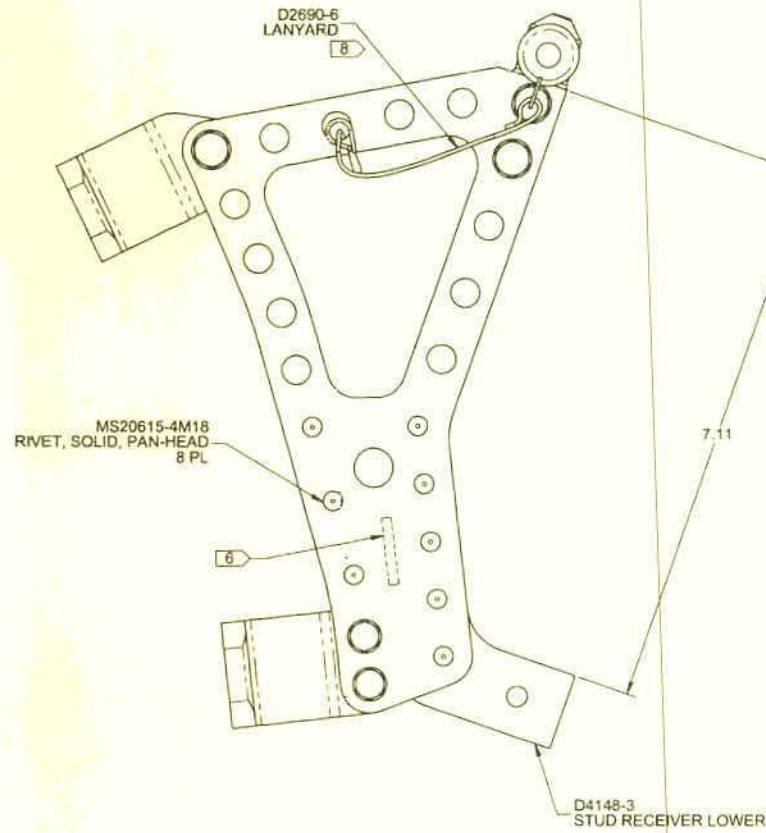
8 7 6 5 4 3 2 1

D

C

B

A



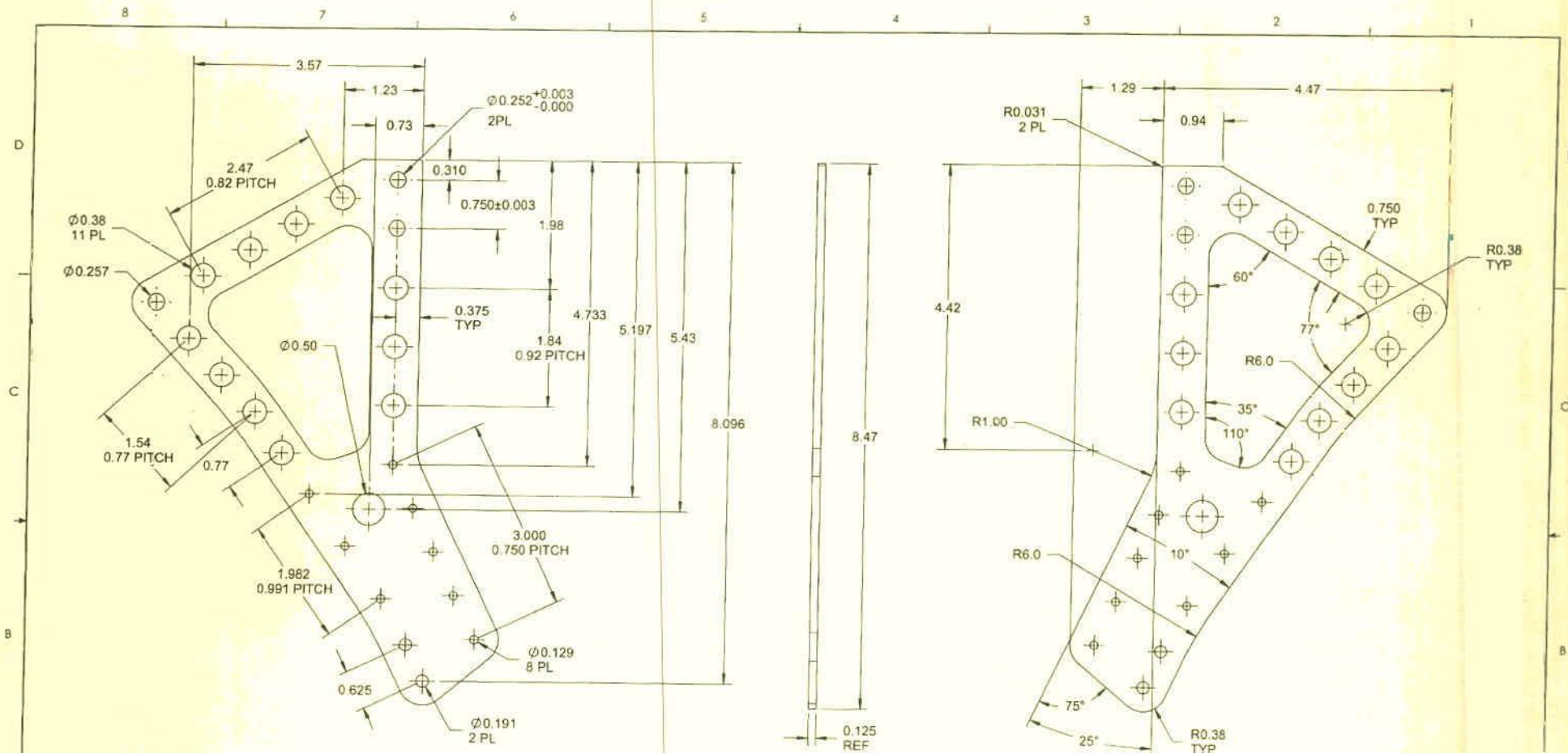
D4148-041 FWD X-TUBE LUG ASSY

RELEASED
2013-08-16

DESIGN	MB	DART AEROSPACE LTD	
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. E
MFG. APPR.	<i>[Signature]</i>	D4148	SHEET 2 OF 5
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	FWD X-TUBE LUG ASSY	NTS
DATE	13.07.22	COPYRIGHT © 2019 BY DART AEROSPACE LTD	
THIS DOCUMENT IS PRELIMINARY AND CONFIDENTIAL. IT IS NOT TO BE USED FOR ANY PURPOSE OR DISCLOSED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.			

8 7 6 5 4 3 2 1





D4148-1 FWD X-TUBE LUG PLATE

NOTES:

- 1) MATERIAL: 303/304/316 STAINLESS STEEL 0.125" SHEET ANNEALED 2B FINISH, PER MIL-S-5059 OR AMS 5513/5524 OR ASTM A240 OR ASME SA240 REF DART SPEC M304S11GA OR M303S11GA
- 2) FINISH: NONE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK ALL SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.52 lbs

DESIGN	MB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED	<i>[Signature]</i>	DRAWING NO. D4148	REV. E SHEET 3 OF 3
MFG. APPR.	<i>[Signature]</i>	TITLE FWD X-TUBE LUG ASSY	SCALE NTS
APPROVED	<i>[Signature]</i>	COPYRIGHT © 2016 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL. NO PART OF THIS DOCUMENT IS TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, WITHOUT PERMISSION FROM DART AEROSPACE LTD.	
DE APPR.	<i>[Signature]</i>		
DATE	13.07.22		

RELEASED
2013-08-16
[Signature]

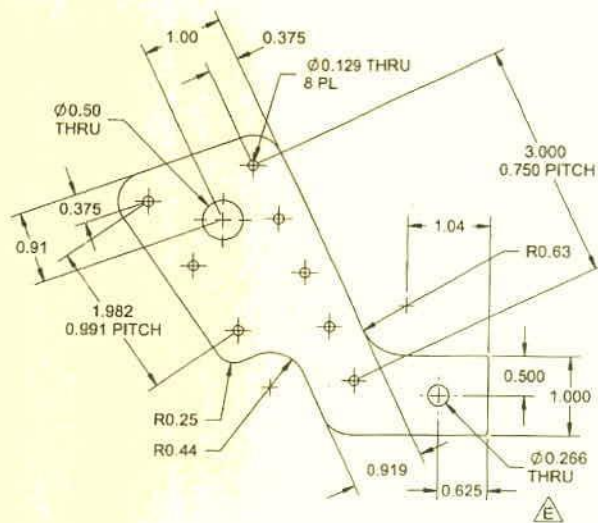
8 7 6 5 4 3 2 1

D

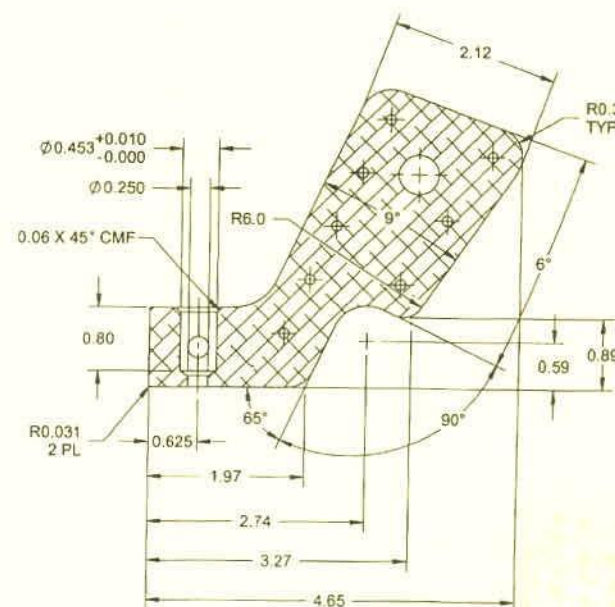
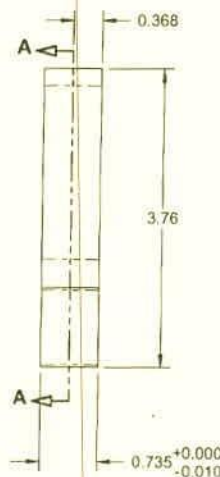
C

B

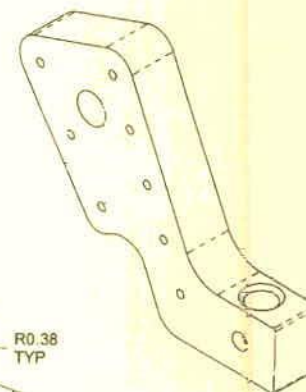
A



D4148-3 STUD RECEIVER LOWER



SECTION A-A

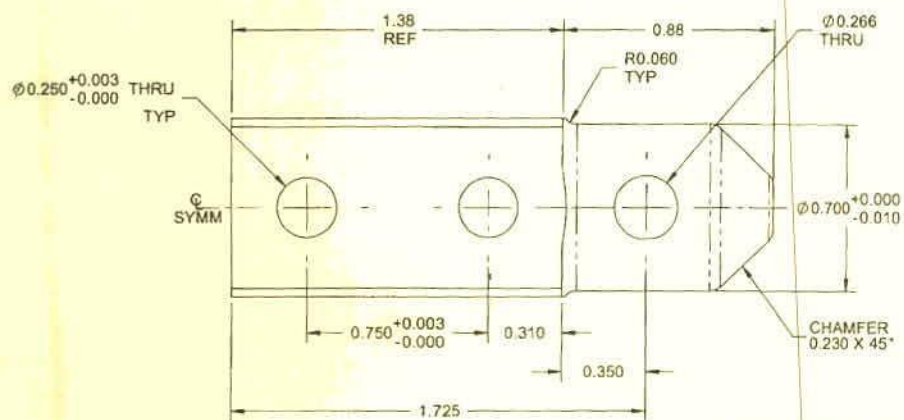


RELEASED
2013-08-16

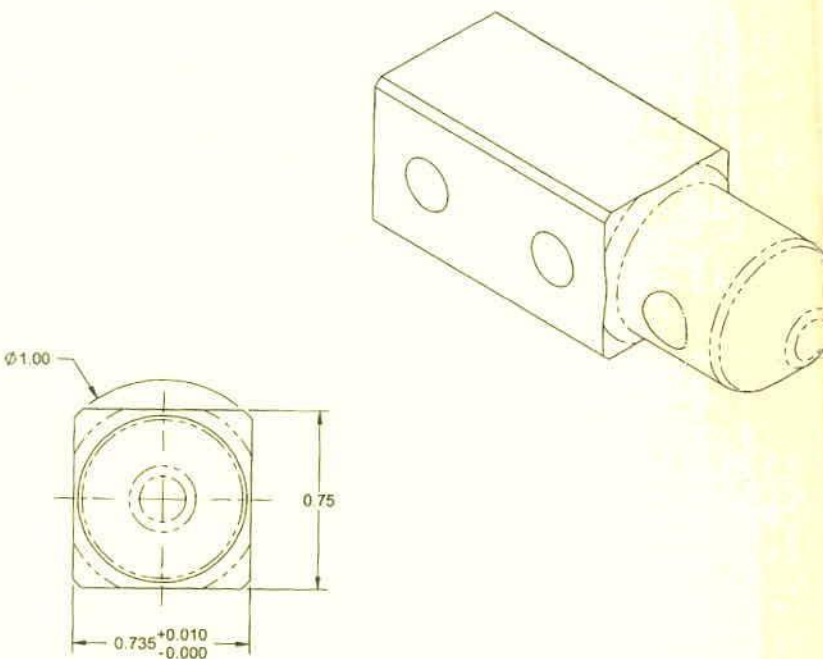
- NOTES:**
- 1) MATERIAL: 303/304/316 STAINLESS STEEL BAR PER ASTM A582 OR ASTM A276
REF DART SPEC M304B OR M303B
 - 2) FINISH: NONE
 - 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK ALL SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: NONE
 - 7) WEIGHT: 1.51 lbs

DESIGN	MB	DART AEROSPACE LTD	
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. E
MFG. APPR		D4148	SHEET 4 OF 5
APPROVED		TITLE	SCALE
DE APPR		FWD X-TUBE LUG ASSY	NTS
DATE	13.07.22	COPYRIGHT © 2010 BY DART AEROSPACE LTD	

8 7 6 5 4 3 2 1



D4148-5 EYEBOLT STUD



- NOTES:**
- 1) MATERIAL: 303/304/316 STAINLESS STEEL BAR PER ASTM A582 OR ASTM A276
REF DART SPEC M304B OR M303B
 - 2) FINISH: NONE
 - 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK ALL SHARP EDGES. 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: NONE
 - 7) WEIGHT: 0.27 lbs

DESIGN	MB	DART AEROSPACE LTD	
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. E
MFG. APPR.		D4148	SHEET 2 OF 5
APPROVED		TITLE	SCALE
DE APPR.		FWD X-TUBE LUG ASSY	NTS
DATE	13.07.22	COPYRIGHT © 2016 BY DART AEROSPACE LTD.	

RELEASE
2013-08-16

